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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,268	06/29/2001	Arne W. Ballantine	10964-057001 / PP 765	8057
26161	7590	04/06/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			MARTIN, ANGELA J	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

5X

Office Action Summary	Application No.	Applicant(s)	
	09/896,268	BALLANTINE ET AL.	
	Examiner	Art Unit	
	Angela J. Martin	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 7-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-38 is/are allowed.
- 6) ☒ Claim(s) 1,4,7-10 and 23 is/are rejected.
- 7) ☒ Claim(s) 3,11-22 and 39-59 is/are objected to.
- 8) ☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to the Amendment after Final Rejection filed on February 25, 2004. The Applicant has amended claims 1 and 7, cancelled claims 5 and 6, and has added new claim 59. Claims 1, 3, 4, and 7-59 are pending. The Applicant has overcome the objection to claims 3 and 4. However, after reviewing amended claim 1, the Examiner found prior art to make the following new rejection and the finality of that prior Office Action is withdrawn.

Claim Objections

1. Claims 39-58 are objected to because of the following informalities: Claims 39-58 are duplicates of claims 1, 3, 4, and 7-23, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1, 4, 7-10, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa et al., U.S. Pub. No. 2001/0050191 A1.

Rejection of claims 1, 4, 7-10, 23 drawn to a method of operating a fuel cell system.

Ogawa et al., teach a method of operating a fuel cell system comprising a fuel cell stack and a plurality of fuel cells (p. 1, sect 0003), the method comprising monitoring an operating parameter associated with the fuel cell stack; and adjusting a temperature of the stack based on the operating parameter, wherein adjusting the temperature comprises adjusting coolant flow through the stack, and adjusting coolant flow comprises restricting coolant flow through the stack (p. 3, sect. 0025). Additionally, it teaches the operating parameter is a power output from the fuel cell system which is a temperature of the fuel cell associated with the stack (p. 1, sect. 0007). It also teaches adjusting coolant flow further comprises unrestricting coolant flow through the stack (p. 3, sect. 0025); wherein restricting and unrestricting coolant flow are performed as a function of time (p. 5, sect. 0044). It teaches restricting and unrestricting coolant flow are performed to cause the operating parameter to be a predetermined level, wherein the predetermined level is within about 15% of an operating parameter under normal operation of the fuel cell system (p. 3, sect. 0025). In addition, it teaches the method is performed as a feedback loop (Fig. 1).

Thus, the claims are anticipated.

Allowable Subject Matter

4. Claims 3, 11-22, and 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The Applicant claims a method of operating a fuel cell system as described in amended claim 1, wherein the operating parameter is a power output (voltage) from the fuel cell. Applicant claims a method of operating a fuel cell system as described in amended claim 1, wherein the fuel cell system further comprises a first end plate associated with a first end of the stack, and the method further comprises heating the first end plate.

The prior art of record does not disclose the method further comprises the operating parameter is a power output (voltage) from the fuel cell; nor does the prior art of record disclose heating the first end plate.

6. Claims 24-38 are allowed.

7. The following is an examiner's statement of reasons for allowance:

The Applicant claims a method of operating a fuel cell system comprising a fuel cell stack, the method comprising monitoring voltages of a set of fuel cells and restricting coolant flow through the stack when one or more of the predetermined voltages deviates from a predetermined voltage range.

The prior art of record does not disclose monitoring voltages of a set of fuel cells and restricting coolant flow through the stack when one or more of the predetermined voltages deviates from a predetermined voltage range.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments with respect to claims 1, 3-5, and 11-23 have been considered but are moot in view of the new ground(s) of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJM


Patricia Green
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Technology Center 1700